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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,129	02/11/2004	Kenji Sakamoto	010755.53231US	2463
23911 7590 12/27/2007 CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			EXAMINER ZARE, SCOTT A	
			ART UNIT 3627	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/775,129

**Applicant(s)**

SAKAMOTO ET AL.

**Examiner**

SCOTT A. ZARE

**Art Unit**

3627

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02/11/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-850)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 20040211 and 20051219

### **DETAILED ACTION**

#### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Information Disclosure Statement***

The information disclosure statement(s) (IDS) submitted on 02/11/2004 and 12/19/2005 are being considered by the examiner.

#### ***Specification***

The abstract of the disclosure is objected to because it is not a single paragraph in narrative form and consequently does not enable the reader thereof to determine quickly from a cursory inspection of the nature and gist of the technical disclosure. Correction is required. See MPEP § 608.01(b).

#### ***Claim Objections***

Claim 1 is objected to as failing to comply with 37 CFR 1.75(i), which requires that, “where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation.” Applicant is required to either cancel the claim(s), or else to rewrite the claim(s) in proper form.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 1 recites the limitation "the strength of relationship" in line 3, "the number of pieces" in line 5, and "the same group" in line 8. There is insufficient antecedent basis for these limitations in the claim.

Claim 2 recites the limitation "the first time" in line 3, "the measure of relationship" in line 5. There is insufficient antecedent basis for these limitations in the claim.

Claim 3 recites the limitation "the appropriate values" in line 3. This phrase is vague and indefinite because it is unclear which values are "appropriate." Furthermore, there is insufficient antecedent basis for this limitation in the claim.

Similarly, claim 4 recites the limitation "the appropriate ID tag" in line 5. This phrase is vague and indefinite because it is unclear which ID tag is "appropriate." Furthermore, there is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the appropriate parameter setting" in line 3. This phrase is vague and indefinite because it is unclear which parameter setting is "appropriate." Furthermore, there is insufficient antecedent basis for this limitation in the claim.

For purposes of this office action, “appropriate” has been interpreted broadly to such that it does not further limit the “values” as discussed in claim 3, the “ID tag” as discussed in claim 4, or the “parameter setting” as discussed in claim 5.

Claim 6 recites the limitation “the same group” in line 5. There is insufficient antecedent basis for these limitations in the claim.

Claim 7 recites the limitation “the same group” in line 2, “the strength of relationship” in line 3, “the pair of ID tags” in line 6, and “the first time” in line 7. There is insufficient antecedent basis for these limitations in the claim.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 1, 2, and 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Swann et al. (US 6,901,304).

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In regard to claim 1, Swan discloses a tag grouping system comprising:

- parameter storage means for storing a parameter which represents a measure of the strength of relationship among a plurality of ID tags. (See column 6, lines 13-15,

disclosing "data structures and persistent storage **202**." It should be noted that parameters, e.g., the "Batch-ID" of Swan (see column 12), represents information about a group of items and thus is "a measure of the strength of relationship among a plurality of ID tags."

- parameter adjusting means for increasing and decreasing values of the parameter according to the number of pieces of ID information detected simultaneously in the ID tags by a mobile tag reader (see column 5, line 59 - column 6, line 4, disclosing that "the data storage element **202**" updates the data structures); and
- judging means for judging a plurality of ID tags as belonging to the same group according to values of the parameter stored in the parameter storage means (see column 6, lines 31-44, disclosing "a software interface **203**" which provides a mechanism for determining and reporting relationships among items).

In regard to claim 2, Swan shows the tag grouping system according to claim 1, wherein when ID information is detected simultaneously in ID tags for the first time, the parameter adjusting means newly sets the parameter for the ID tags to indicate the measure of relationship between of ID tags. (See column 15, disclosing a process in which an item "enters the tracking system.") Swan discloses relating a pair of ID tags, since Swan discloses detecting relationships among all ID tags, and setting the parameter indicating the relationship of any number of ID tags, which would include the number of tags being two (a pair).

In regard to claim 5, Swan shows the tag grouping system according to claim 2, wherein when a value of the parameter stored in the parameter storage means becomes zero, the parameter adjusting means clears the appropriate parameter setting. (See column 7, disclosing deletions of invalid data fields). For purposes of this office action, “zero” and “invalid” data fields have been interpreted to be interchangeable terms.

In regard to claim 6, Swan shows the tag grouping system according to claim 1, wherein when a value of the parameter stored in the parameter storage means exceeds a predetermined threshold, the judging means judges that the ID tags relevant to the parameter value belong to the same group. (see column 6, lines 31-44, disclosing “a software interface 203” which provides a mechanism for determining and reporting relationships among items). In Swan, the “threshold” is simply whether two ID tags are related such that they fall within the same group, e.g., batch-id.

In regard to claim 7, Swan shows a tag grouping method for judging a plurality of ID tags as belonging to the same group according to values of a parameter which represents a measure of the strength of relationship among the plurality of ID tags (see column 6, lines 31-44, disclosing “a software interface 203” which provides a mechanism for determining and reporting relationships among items), comprising a parameter setting step of newly setting the parameter for a pair of ID tags when ID information is detected simultaneously in the pair of ID tags for the first time (See column 15, disclosing a process in which an item “enters the tracking system.”). Swan discloses relating a pair of ID tags, since Swan discloses detecting relationships among all

ID tags, and setting the parameter indicating the relationship of any number of ID tags, which would include the number of tags being two (a pair).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Swan et al. (US 6,901,304, filed Aug. 30, 2002, referred hereinafter as "Swan").

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In regard to claims 3 and 4, Swan shows a tag grouping system, as applied above in the rejection of claims 1 and 2 under 35 U.S.C. 102(e), wherein when ID information is detected in a plurality of ID tags, the parameter adjusting means *changes* the appropriate values of the parameter stored in the parameter storage means, and wherein if ID information is detected only in one of a pair of ID tags which has been registered in the parameter storage means, the parameter adjusting means *changes* the parameter value of the appropriate ID tag (see column 5, line 59 - column 6, line 4, disclosing that "the data storage element **202**" updates the data structures; see also column 12, disclosing "Batch Identification."). Swan does not explicitly disclose "increasing" or "decreasing" the values of the parameter.



However, increasing or decreasing the inventory count of a number of items in inventory is well known, hence obvious, to those of ordinary skill in the art, and official notice to that effect is hereby taken.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of invention, to have included “increasing” or “decreasing” the values when updating numerical parameters such as a quantity of items in a given batch, as is well known to do, in order to maintain an accurate accounting of the number of items in inventory, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Markman, US 5,794,213 (Reforming grouped items)

Soga et al., US 6,304,856 (Tracking freight using electronic tags)

Berquist et al., US 2002/0185532 (RFID data collection and use)

Bauer et al., US 2003/0216969 (Inventory management system)

Baldassari et al., US 2004/0004119 (Package sortation using radio frequency identification technology)

Kovach, US 2004/0143505 (Tracking disposition of articles)

Brookner, US 2005/0134436 (Multiple RFID anti-collision interrogation method)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCOTT A. ZARE whose telephone number is (571)270-3266. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ryan Zeender can be reached on (571) 272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Scott A. Zare  
December 17, 2007  
Art Unit 3627

/Gerald J. O'Connor/  
Primary Examiner  
Group Art Unit 3627